

*A new Form of Freshwater Sponge.*

A note was read from Mr. Edward Potts, reporting the discovery in Chester Creek of another curious form of freshwater sponge, a third species of *Carterella*, resembling *C. tubisperma* in the character of its birotulates and the length of its foraminal tubes, but much more robust than that species. The tendrils are nearly as long as those of *C. tenosperma*, but broad, flat, and riband-like.

Thus far it is the most conspicuous and peculiar of our American forms. He proposed for it the name *Carterella latitenta*.—*Proc. Acad. Nat. Sci. Philad.*, July 26, 1881, p. 176.

*Note on the Structure of the Posterior Foot of Toxodon.*

By E. D. COPE.

The position of the genus *Toxodon* in the system of Mammalia is a question upon which few authorities have expressed positive opinions, and which is generally regarded as still an open question. In the lack of certainty on the subject, a separate order, the "Toxodontia," has been proposed for its reception. It is known that the genus is unguulate, but the opinions of authors are much divided as to its relations to the three principal orders included under that head. Resemblances to the Proboscidea have been detected; but Prof. Gervais ('Comptes Rendus,' 1878) asserts that there is a close resemblance to the genus *Hippopotamus* in the structure of the posterior foot.

Having come into possession of remains of *Toxodon*, which include the greater part of the skeleton, I make a few observations on the affinities suggested by the posterior foot, the only portion just now accessible in my collection. The calcaneum and astragalus have been more or less imperfectly figured by De Blainville and Burmeister, but no one has, to my knowledge, represented the entire foot. The calcaneum is rather short and stout and its external convex tuberosity is of unusual size. Its articular surface is divided into two subequal parts, the internal of which supports the astragalus, the external the fibula. Thus the fibular articulation is of unusual size. The cuboid facet is on the inferior face of the extremity of the calcaneum, thus looking directly downwards when the bone is prone. In order to articulate with the remainder of the foot, the calcaneum must have been inclined upwards and forwards at an angle of  $45^\circ$ , and the cuboid inclined downwards and forwards at a similar angle. That the axis of the astragalus had the latter inclination is proven by the fact that the superior plane of the sustentaculum lies at that angle to the axis of the remainder of the calcaneum. The great convexity of the external tuberosity for the astragalus will also permit of such a position for the astragalus. The navicular facet of the astragalus is plane and truncates the bone somewhat inferiorly as well as distally, so as to present in the same way as the cuboid. There is probably no cuboid facet. I have not seen the cuneiform bones. The metatarsals and phalanges are